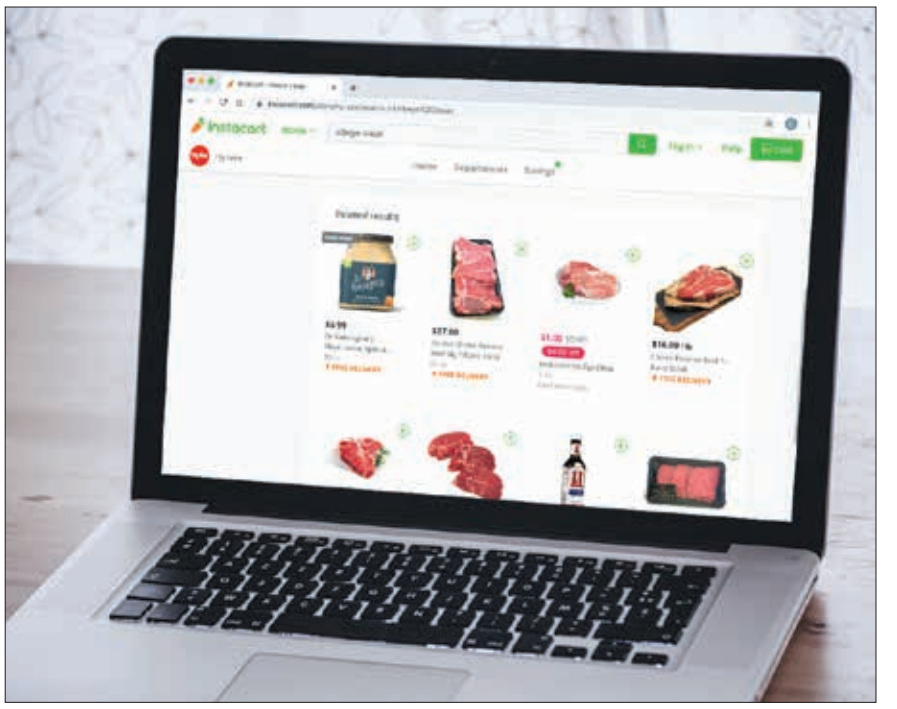
Technology on the Fast Track

Expect more tech tools to create transparency in a post-pandemic livestock world.

by **Kindra Gordon**



Technology was filtering into all facets of the agricultural industry at a moderate pace prior to the COVID-19 pandemic. But now, expect that pace to accelerate in response to the transparency and digital access consumers are seeking in the aftermath of the coronavirus.

"The consumer is waking up," says Rodrigo Carranza, an executive with Diamond V, a global animal nutrition and health company. He explains, "People are thinking about what goes on to get food to their plate and where food comes from. [For technology] it creates a lot of opportunities."

Carranza spoke during the Digital Animal Summit Virtual Meet-Up, which included over 100 animal industry executives, veterinarians and investors from all livestock sectors, held via Zoom in mid-May of this year.

Tech takeaways

Common themes shared by summit participants included the realization that even with stay-at-home orders and social distancing, with today's technology, consumers around the world can stay very well connected.

Second, several speakers underscored this takeaway: COVID-19 pointed out that without digital platforms, it is hard to do business. With that, e-commerce, and especially online grocery shopping, has taken a leap forward.

Additionally, the disruption the pandemic has caused to traditional ways of doing business, schooling, and food production and distribution has actually created an opportunity to think more creatively and to look outside-the-box toward the future.

The bottom line is this: nothing is really "normal" anymore, and the world is changed because of the virus.

Carranza points to the digital ability to provide information that has been unleashed by all sectors to reach clients during the stay-at-home time of the pandemic. From recipes to price specials, he anticipates digital communication will also morph into sharing more information in the food sector by suppliers and producers. He notes price, taste and health are currently the biggest drivers for consumer food purchases, but in the future, information on how that food was produced could also play a larger role as an influencing factor.

Specific to the beef industry, more and more consumers are indicating they want to know where their beef comes from. For the industry to achieve this feat, many industry experts are pointing to traceability via blockchain technology, which allows data sharing and data verification and creates transparency — and validation — for the consumer to trace where his food came from.

However, it is not just about the consumer. On the producer side of the aisle, blockchain offers benefits by helping identify potential improvements in efficiency, which may also benefit long-term sustainability.

But what about the balancing act between traceability for consumers and confidentiality for businesses? Heather Donley, representing the cattle verification services provided by *Progressive Beef,* noted the beef industry must continue to work toward using technology to find the best of both worlds — where producers can select what information is given in a format that is understandable by consumers. Donley added, "We need to do a better job at working together — to be transparent but protect information at the same time. We are on the same team."

She connected the verification and transparency process in working together within the industry to a football saying, "The linebacker can't take out the quarterback to get the ball down the field."

Investor's view

So, what other technological transformations can be expected within the agricultural sector in the near future? Spencer Swazye is the managing director at the Silicon Valley-based investment firm Paine Schwartz Partners, and he anticipates agriculture will be impacted in several ways. He especially sees opportunities for what he calls "precision livestock hardware and software solutions" that can address traceability, supply chain efficiency, animal health, food safety, and hygiene and sanitation — especially at processing plants. Swayze also sees a future in agriculture for robots and automation to address labor challenges.

Additionally, Swayze predicts there may be a surge in new technology for vaccines in agriculture. He notes vaccines were previously a disregarded sector, but that standing has changed as a result of the coronavirus.

Another silver lining Swayze sees developing from the current pandemic is the new acceptance of digital tools for diagnostics and telemedicine. He expects that to transfer to the livestock industry as well. "People across all sectors are becoming more comfortable with using tech tools," he concludes. HW

Tech on the horizon

The transition to new technology is already underway in the livestock industry. Some examples include:

- **Telemedicine with veterinarians.** Video capabilities are being utilized to connect livestock producers and veterinarians to assess care for specific animals and to determine if an in-person appointment is needed.
- **Digital diagnostic tools that allow for linking to an app or other electronic recordkeeping system are already available with more on the way.** From thermometers and stethoscopes to neck collars, ear tags, scales, feedbunks and waterers, expect digital diagnostic options to continue advancing.
- **Continued research and product development.** Researching diseases, genome mapping and the gut microbiome are continued areas of interest in human health, which then overlap with animal health as well. In addition, as more knowledge is gained, anticipate new developments in nutritional supplements and animal health products. HW